

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-20 Cancelled

21. (Currently amended) A method for inducing chondrogenesis, said method comprising administering an effective amount of a composition comprising

(1) purified CD105+ non-tissue culture expanded cells isolated from bone marrow by the following process:

(a) isolating mononuclear cells from bone marrow;

(b) incubating the cells with anti-CD105 antibody microbeads; and

(c) isolating the cells bound to the microbeads,

and

(2) a suitable matrix carrier.

22. Cancelled

23. (Currently amended) The method of claim [22] 21 further comprising administering a bone and or cartilage inducing factor.

24. (Original) The method of claim 23 wherein said factor is a BMP.

25. (Original) The method of claim 24 wherein said BMP is selected from the group consisting of BMP-2 and BMP-9.

26. (Currently amended) A method for treating arthritis, said method comprising administering an effective amount of a composition comprising

(1) purified CD105+ non-tissue culture expanded cells isolated from bone marrow by the following process:

- (a) isolating mononuclear cells from bone marrow;
- (b) incubating the cells with anti-CD105 antibody microbeads; and
- (c) isolating the cells bound to the microbeads,

and

(2) a suitable matrix carrier.

27. (Currently amended) A method for treating articular cartilage defects or damage, said method comprising administering an effective amount of a composition comprising

(1) purified CD105+ non-tissue culture expanded cells isolated from bone marrow by the following process:

- (a) isolating mononuclear cells from bone marrow;
- (b) incubating the cells with anti-CD105 antibody microbeads; and
- (c) isolating the cells bound to the microbeads,

and

(2) a suitable matrix carrier.

28. (Currently amended) A method for repairing cartilage tissue said method comprising administering an effective amount of a composition comprising

(1) purified CD105+ non-tissue culture expanded cells isolated from bone marrow by the following process:

- (a) isolating mononuclear cells from bone marrow;
- (b) incubating the cells with anti-CD105 antibody microbeads; and

(c) isolating the cells bound to the microbeads,

(2) a suitable matrix carrier; and

(3)2) a factor selected from a bone inducing factors and cartilage inducing factors.

29. (Previously presented): The method of claim 28 wherein said factor is a BMP.

30. Cancelled

31. (Currently amended) The method of claim [30] 29 wherein said BMP is selected from the group consisting of BMP-2 and BMP-9.